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United States Patent Application

20040023199

Kind Code

A1

Lally, Robert William

February 5, 2004

Technology explorer toy

Abstract

Involving mysterious gravity and mystical energy, an adjustable, educational, structural model incorporates an object suspended from a frame in various ways with flexible line, and instrumented with masses connected to it by springs. The structure functions to transfer forces of nature and man into motion, and motion into deflection of the springs, that both sense and suppress motion. Changing the structure modifies its behavior in unusual ways. Sensors don't sense, objects don't bounce, and motion doesn't change, as expected. Adding weights to a swinging object, which falls freely along its arcing path, does not change the coasting rate, thus verifying Newton's famous laws of motion. Testing the behavior and monitoring the health of the structural model dramatically demonstrates the radiant, vibrant, communicant, dynamic nature and behavior of energetically interacting people and things, and how forces involved in transfers of energy animate the world.

Inventors: Lally, Robert William; (Orchard Park, NY)

Correspondence Name and Address: Robert W. Larry
7 Eagle Heights Drive
Orchard Park
NY
14127
US

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U.S. Class at Publication:

434/300

Intern'l Class:

G09B 023/06

Claims

I claim:

1. An educational toy for exploring technology, comprising: a frame; an object suspended from said frame; a flexible line connecting said object to said frame; at least one sensor having a mass attached to a spring connected to said object; whereby said object under the influence of gravity moves freely after being manually energized, and said spring deflects when said object accelerates normally in the direction said spring deflects.
2. The educational toy of claim 1, wherein said object is a cylindrical body of hard rubber material having holes routing and gripping said line.
3. The educational toy of claim 1, wherein said line is one piece clamped to said object and said frame at multiple pivot points forming two triangular-shaped loops spaced apart that suspend said object on four like sections of said line; whereby said line slides relative to said frame and said object to adjust and align the position of said object.
4. The educational toy of claim 1, wherein said line is connected to said frame at two pivots spaced apart, whereby said object coasts as a glider type swing with parallel suspension arms when manually energized in the direction of a line between said pivots, and coasts as a simple swing with one composite suspension arm when energized in a direction perpendicular to said line.



Notice of References Cited

Application/Control No.
20040023199
10/631,247

Applicant(s)/Patent Under
Reexamination
LALLY, ROBERT WILLIAM

Examiner
Kurt Fernstrom

Art Unit
3712

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U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-3,354,559	11-1967	BECK BERNARD O	434/302
	B	US-5,067,902	11-1991	Phillips, Thomas G.	434/276
	C	US-5,137,487	08-1992	Hall, Jr., Rudolph V.	446/256
	D	US-3,698,800	10-1972	Belgau, Frank A.	351/239
	E	US-6,110,004	08-2000	McKinley et al.	446/490
	F	US-6,015,296	01-2000	Fenkany et al.	434/301
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